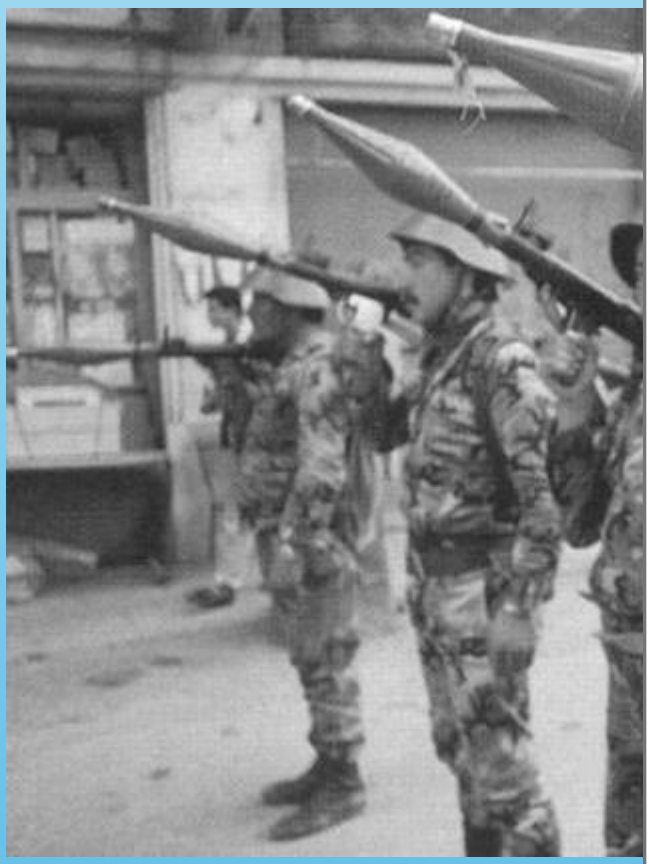
One of the most groundbreaking weapons invented by the Soviet Union became one of the most ubiquitous weapons in the Middle East and in places of insurgency the world over. The RGP and its variants re-made warfare, asymmetric warfare, and terrorism in modern time.



The RPG-7 : The Standoff Weapon that Changed Conflict

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Introduction

The RPG – 7 is one of those arms that, apart from the AK-47, could serve as the most recognizable emblem of the Middle East. The RPG – 7 was shipped into the Middle East in bulk shipments, mostly from the European nation of Czechoslovakia, which became an arms clearinghouse or emporium. The RPG – 7 would define mostly the spectrum of asymmetrical operations. There are few files of news footage from any war, the Lebanese Civil War among them, in which this weapon is not being seen fired and used against others, equally armed and determined. The RPG-7 has become the new means of effective, powerful standoff warfare, it has also obtained a negative perception among some, and a positive one among others.

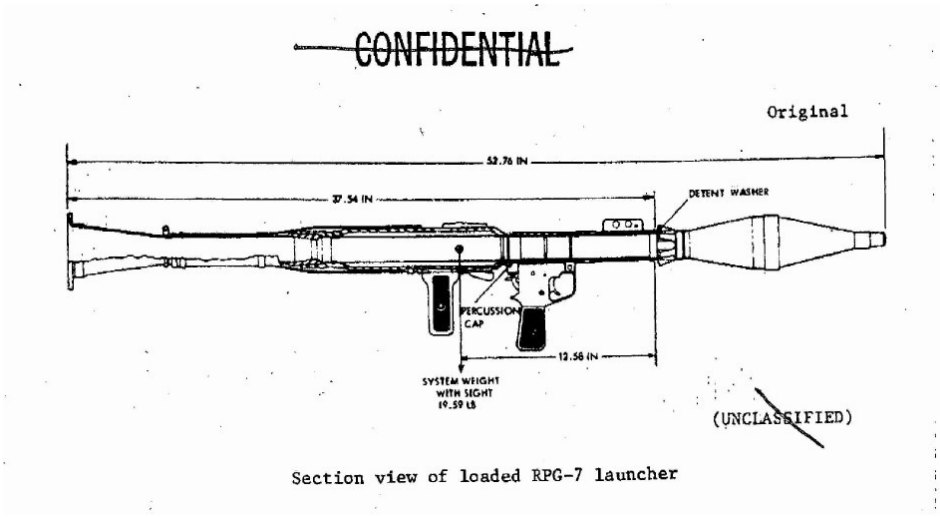
Technical Details

The Rocket Propelled Grenade was developed by the Soviet Union in the 1950s after a brief break after the Second World War. It's ancestry and development path is too long to trace here but, it came from inspirations from contact with German models of anti-armor weapons.

Initially it was released as the RPG-2 and then in the late 1960s it was improved and the RPG-7 variant appeared in time for the later mid-Vietnam and 1973 Yom Kippur / October War. It weighs 14.7 pounds and is generally 37.2 inches long or 3.1 feet when unarmed, with the warhead (26 inches) becomes about 4.5 feet long as a portion of the round is placed halfway into the launcher. The normal warhead is around 80 millimeters or 3.1 inches in diameter. The RPG-2 mainly relied on a strong ejection charge which reduced its range, and may have endangered the user. With the RPG-7 this system was changed and improved. The warhead is initially ejected by a small charge and then small rocket packs at the end of the warhead propel the grenade the rest of the distance. These ignite just outside of the launcher after the ejection. The ejection and ignition of the warhead is a quick process but they are independent mechanisms.

The warhead typically was a HEAT round (High Explosive Antitank), and the range is / was 160 meters or 524 feet, 174 yards. Other authors have stated that a target could be hit

at a maximum range of 545 yards (Hogg). This range is not covered in official unclassified reports and is perhaps the absolute maximum range. If so, it is unlikely to be as effective as the target may move in the meantime. The use of the RPG at 174 yards made the RPG effective at a long distance, however, it was likely more frequently used at ranges of 75 yards or less, especially in urban fighting. Armor penetration would vary but normally was in the 13 inches range. The final improvement for the RPG -7 was the addition of a cone at the rear of the launcher which funnels the smoke and discharge from the rocket and protects the shoulder and back of the user. It does, however, make it dangerous to be directly behind the user.



Section view of loaded RPG-7 launcher

It is important to note that the RPG's contemporary, the LAW, was lighter by more than half, being only 5.2 pounds, and shorter at 35 inches or 2.9 feet but the round is concealed, not protruding. The warhead and the effective range was also less, only being 66 millimeters and an effective range of 150 meters. The armor penetration was just an inch shorter, at 12 inches on normal use. The

two were closely compatible in technical terms but there was a difference of use and perception, this is discussed below.

Use in Combat

The RPG and its variants were initially introduced onto the battlefield in order to counter tanks and armor. The RPG was designed to be fired from a distance and to allow precision hits against the undercarriage of the turret, blowing holes at the joints and perhaps damaging the firing mechanism, thus knocking out the main element of the tank's effectiveness. The RPG could also be fired at the treads, the tracks and the individual wheels that combined to allow for the tank's mobility. Some tanks, as well as general armored vehicles, are unevenly armored in their surface. Some areas are more greatly armored than others and the RPG allowed for better approaches and the ability to hit vulnerable areas that were more thinly armored.

Stealth and mobility were the key assets, being able to fire from a prone or laying position or on a knee meant that the soldier had a low profile versus the normal height of personnel in a jeep or any other vehicle, making it hard for the crew being attacked to pick up on the threat. Some soldiers in desert environments could dig deep foxholes which enabled them to fire rounds at near ground level and aimed slightly upwards. The RPG was a crucial device for approaching pillboxes or machine gun positions and

firing a round which would kill the operators and would damage or destroy the gun. Again, it is a versatile weapon that is mostly limited by the operator and their level of experience and ability to exploit cover. In urban warfare contexts, it could enhance all of these. In cities you could quickly jump around corners, aim a round, fire, and then leap back to safety. In places such as downtown Beirut, with the damaged buildings and fallen material, men could hide just below site and pop up to do the same. A round could be fired from a rooftop down onto a car and the damage would kill those inside and cause damage but not as much damage as a car bomb or other device which might kill civilians or people around it. This made the RPG a leading choice in asymmetric fighting because the user of the weapon could hide faster and could fire on a fairly rapid basis, shifting positions and firing before a more static or heavier weapon could be loaded, sited, and fired. This type of close proximity firing allowed for more accuracy and greater assurance that the damage would be effective.

The RPG did not involve too much training or intelligence, a man could be quickly instructed in its use and it could be given to large numbers of men rather than a specialized cadre of soldiers. The soldier could stand

up (or kneel), quickly aim a round at a tank or vehicle, fire, and then run away. Many of the prior weapons had involved some level of sophistication or even a lot more courage as they involved much closer approaches to the vehicle. The range of the RPG meant that you could be close but still far enough away to manage an escape. A final use could be against opposing soldiers. The RPG became a highly serviceable and versatile weapon in combat.

Actual damage against a Centurion (Heavy MBT) Tank. Some images appearing on Youtube.com taken from desert combat conditions likely took place as a result of A-10 Thunderbolt “Warthog” damage.

All of these were introduced in a strong manner in the previously mentioned, 1973 Yom Kippur or October War. The Egyptian troops which came flooding over the Suez Canal embankment came across bearing hundreds of advanced weapons, among them the RPG-7. The Israelis lost up

to 500 tanks in the war, the majority on the Sinai front. On that front the Israelis were the first to encounter the RPG-7, being used effectively against their armor as well as personnel. They remarked about the damage done to the tanks, which were a mixture of varying types and Light and Heavies. These took significant damage and there were also several interactions among troops. These led the Israeli troops to quickly examine and experiment with the RPG's that were left on the battlefield. After this encounter there was sea change in terms of arms. The Israeli army quickly adopted and developed new tactics for its employment. This represents one of the main reasons for the transference of arms as well as the better reason for arms transference. Many nations adopt an arm simply because it is new or someone else has one and the 'keeping up with the Jones's mentality takes over. In this case, the arm had a proven decisive battlefield outcome and it was seen that the future was spelled, RPG.

The Philosophy of Use, Why the Love for It?

The RPG has since taken a strong hold of users and the popular imagination. Soldiers, terrorists, and guerillas use the RPG-7 in the various conflicts in which they faced off with their adversaries. This fascination and love of the RPG has overtaken other contemporary weapons such as the LAW. Indeed, documented assessments by the CIA make reference to the fact that, despite the LAW's fire and forget, one-use capabilities, the RPG

remained favored among the men that used it in combat. What was the key to this popularity and the RPG's continued use?

It is light, it is portable, it can be used multiple times. It was practical because, instead of having to purchase hundreds of individual LAW's, it was easier and faster to carry several RPG warheads into combat and put these in a belt, a bandolier, or a bag and simply carry the means of attack. But it came with an intangible, a quality that could only be felt, something that spoke of a prestige factor.

The RPG could be carried in a highly visible manner. It was something that could be displayed before your comrades and fellow soldiers. It could be brought into a fight and often set the bearer apart in a visual way which the LAW did not provide. It gave the user a more substantial feeling or even reality of importance on the battlefield or in urban conflict. Thus, it has succeeded in creating a type of visual shorthand for the type of violence that is often thought of when we think of impersonal and lurking danger.

This does not mean that the weapon itself is bad or evil, but its use and the practitioners of such a use have developed a distinct reputation in the military and civilian world which is usually on the lower-scale of combat and on the lower social scale. Fighting someone with an automatic or semi-automatic gun or perhaps in a more direct, personal and hand-to-hand manner has generally been viewed as being much better, much more worthy of fighting. This comes from a natural desire to face those that are confronting us, an innate desire not to be caught by surprise and to have a chance to fight for our lives. Standoff weapons such as archery, artillery, the drone, and those remote killers called snipers have long remained on margins and have been held suspect by the majority of those who fight in combat because of the ability to remain hidden, and elusive, because of their weapon's ease and quickness of use. The RPG, however, despite all of this, has leveled the playing field, it has democratized violence and placed into the hands of anyone who could use it. Rather than having to have the latest, flashiest forms of arms, any serious force needs only the practical and instant deliverable of the RPG to meet its needs.

The RPG will remain in its leading position in the mind of people for as long as there is warfare. Regardless of whether it is as widely seen or used, it will remain a constant reminder of the rough and unpredictable nature of the Middle East and how its people conduct combat, how they practice warfare.